

LISTING OF CLAIMS

1. (Previously Presented) A computer implemented method comprising:
receiving by a second network process a first set of data from a first network process;
receiving a notification of death of the first network process;
clearing the first set of data by the second network process if a time period expires, the time period beginning upon receiving the notification of death; and
synchronizing by the second network process the first set of data with a second set of data if the time period does not expire, the second set of data received from the first network process after the first network process restarts.
2. (Previously Presented) The computer implemented method of claim 1 further comprising indicating the first set of data as stale upon receiving the notification of death.
3. (Cancelled)
4. (Original) The computer implemented method of claim 1 wherein the first set of data and the second set of data are synchronized after a done signal is received.
5. (Previously Presented) The computer implemented method of claim 1 further comprising restoring a set of configurations to the network process after the first network process restarts.
6. (Original) The computer implemented method of claim 1 further comprising clearing the second set of data if the time period expires and a done signal is not received.
7. (Previously Presented) A computer implemented method comprising:
detecting death of a first network process;
restarting the first network process;
restoring a set of configurations to the first network process;

if a first set of data is generated by the first network process before a time period expires, the time period beginning upon receiving by the second network process a notification of death of the first network process, then synchronizing by the second network process the first set of data with a second set of data, the second set of data having been generated by the first network process before the death of the first network process; and

if the time period expires, then clearing the second set of data by the second network process.

8. (Previously Presented) The computer implemented method of claim 7 further comprising indicating the second set of data as stale upon receiving the notification of death.

9. (Cancelled)

10. (Original) The computer implemented method of claim 7 wherein the first set of data and the second set of data are synchronized after a done signal is received.

11. (Original) The computer implemented method of claim 7 further comprising
clearing the second set of data if the time period expires and a done signal is not received.

12. (Previously Presented) A network element comprising:
a cross connect control module to host a first and second network process, the first network process to generate a first set of data after restarting and the second network process to synchronize for itself the first set of data with a second set of data generated by the first network process before restarting upon determining a time period has not expired, the second network process to clear the first set of data upon determining the time period has expired, the time period beginning upon receiving a notification of death of the first network process; and

a traffic card coupled to the cross connect module, the traffic card to process a set of traffic with the synchronized first and second set of data.

13. (Original) The network element of claim 12 wherein the cross connect module comprises a first and second memory to host the first and second network process.

14. (Original) The network element of claim 12 wherein the traffic card comprises a set of processors to process the first and second set of data.

15. (Previously Presented) The network element of claim 12 wherein the cross connect module comprises:

a first memory to host the first network process;

a second memory coupled to the first memory, the second memory to host the second network process; and

a third memory coupled to the first and second memory, the third memory to store the first set of data, second set of data, and the synchronized set of data.

16. (Previously Presented) A network element comprising:

a first processor to execute a first and second network process, the first network process to generate a first set of data before restarting and a second set of data after restarting, the second network process to synchronize for itself the first and second set of data upon determining a time period has not expired, the second network process to clear the first set of data upon determining the time period has expired, the time period beginning upon receiving a notification of death of the first network process; and

a second processor coupled to the first processor, the second processor to process a set of traffic using the first set of data before the first network process restarts and a third set of data after the first network process restarts.

17. (Previously Presented) The network element of claim 16 wherein the first processor comprises a memory to store the first, second and third set of data.

18. (Previously Presented) The network element of claim 16 further comprising the first processor to allocate a first memory to the first network process and a second memory to the second network process.

19. (Previously Presented) The network element of claim 16 further comprising

the first processor to allocate a first memory to the first network process, a second memory to the second network process, and a third memory to store the first set of data, the second set of data, and the third set of data.

20. (Previously Presented) A network element comprising:

a first memory to host a first network process, the first network process to generate a first set of data before restarting and a second set of data after restarting;

a second memory coupled to the first memory, the second memory to host a second network process, the second network process using the first and second set of data if a time period has not expired, the second network process to clear the first set of data if the time period has expired, the time period beginning upon receiving a notification of death of the first network process; and

a third memory coupled to the first and second memory, the third memory to store the first set of data before the first network processes restarts and to store for itself a synchronized set of the first and second set of data after the first network process restarts.

21. (Previously Presented) The network element of claim 20 wherein the first memory, the second memory and the third memory are main memory.

22. (Previously Presented) The network element of claim 20 wherein the first memory, the second memory, and the third memory are mass storage.

23. (Previously Presented) The network element of claim 20 wherein the first memory, the second memory, and the third memory are a set of regions of a memory.

24. (Previously Presented) A system comprising:

a first network element to execute a first network process, the first network process to generate a first set of data before restarting and a second set of data after restarting; and

a second network element coupled to the first network element, the second network element to execute a second network process, to receive a notification of death of the first network process, to start a counter upon receiving the notification of death, to store the first and second set of data, to clear the first set of data upon determining the counter has exceeded a time period and to synchronize for itself the first and second set of data upon determining the counter has not exceeded the time period.

25. (Previously Presented) The system of claim 24 wherein the second network element comprises:

a first memory to store the first set of data and the synchronized set of data; and a second memory to store the second set of data.

26. (Previously Presented) The system of claim 24 further comprising the second network element to clear the first and second set of data if a time period expires.

27. (Previously Presented) The system of claim 24 further comprising the second network element to mark the first set of data as stale upon receiving the notification of death.

28. (Previously Presented) A machine-readable medium that provides instructions, which when executed by a set of processors of one or more processors, cause said set of processors to perform operations comprising:

receiving by a second network process a first set of data from a first network process;

receiving a notification of death of the first network process;

clearing the first set of data by the second network processes if a time period expires, the time period beginning upon receiving the notification of death; and

synchronizing the first set of data with a second set of data if the time period does not expire, the second set of data received from the first network process after the first network process restarts.

29. (Previously Presented) The machine-readable medium of claim 28 further comprising indicating the first set of data as stale upon receiving the notification of death.

30. (Cancelled)

31. (Previously Presented) The machine-readable medium of claim 28 wherein the first set of data and the second set of data are synchronized after a done signal is received.

32. (Previously Presented) The machine-readable medium of claim 28 further comprising restoring a set of configurations to the first network process after the first network process restarts.

33. (Previously Presented) The machine-readable medium of claim 28 further comprising clearing the second set of data if the time period expires and a done signal is not received.

34. (Previously Presented) A machine-readable medium that provides instructions, which when executed by a set of processors of one or more processors, cause said set of processors to perform operations comprising:

- detecting death of a first network process;
- restarting the first network process;
- restoring a set of configurations to the first network process;
- if a first set of data is generated by the first network process before a time period expires, the time period beginning upon receiving by the second network process a notification of death of the first network process, then synchronizing the first set of data by a second network process with a second set of data, the second set of data having been generated by the first network process before the death of the first network process; and
- if the time period expires, then clearing the second set of data by the second network process.

35. (Previously Presented) The machine-readable medium of claim 34 further comprising indicating the second set of data as stale upon receiving the notification of death.

36. (Cancelled)

37. (Previously Presented) The machine-readable medium of claim 34 wherein the first set of data and the second set of data are synchronized after a done signal is received.

38. (Previously Presented) The machine-readable medium of claim 34 further comprising clearing the second set of data if the time period expires and a done signal is not received.

39. (Previously Presented) A method of a first network process, comprising:
receiving data from a second network process;
receiving a death notification regarding the second network process;
determining the data received before the death of the second network process is stale based on the death notification;
receiving new data from the second network process after it has been restarted;
storing the new data as a temporary data;
clearing the stale data upon determining that a timer has expired; and
synchronizing by the first network process for itself the stale data and the new data if a done signal is received from the second network process before the timer expires, the timer being started upon receiving the death notification.

40. (Previously Presented) The method of claim 39, wherein the timer is initialized upon receipt of the death notification.

41. (Previously Presented) The method of claim 40, wherein the death notification is based on an absence of a heartbeat from the second network process.

42. (Previously Presented) The method of claim 39, further comprising clearing the stale data and the new data if the timer expires before the done signal is received.

43. (Previously Presented) A method comprising:
receiving a first data from a first network process at a second network process;
receiving a notification of death of the first network process;
marking the first data as stale by the second network process;
starting a timer for stale data by the second network process, the timer being
started upon receiving the notification of death;
receiving a notification of first process revival; and
clearing a stale indication if the timer has not expired at the second process in
response to the notification of first process revival.